DIVISION OF GENETICS
INDIAN AGRICULTURAL RESEARCH INSTITUTENEW DELHI-12

No.GD/SP/63-70/2010—11/ **Dated:**

M/s_____

Dear Sir,

1. Sealed Quotations for the supply of articles mentioned below are invited from the manufacturer/ authorized dealer so as to reach this office latest by**....18.1.2011.....at 1.00PM.....** please note that: Quotation for "as mentioned below" along with the due date should be clearly indicated on the sealed cover.
2. In the event of quoting for more than one item mentioned below, separate quotations for each item should be sent.
3. Quotations received after the due date will not be considered.
4. **Prices should be quoted on FOB, CIF/ FOR destination at the Division of Genetics, IARI.**
5. Please indicate the specific make or brand the prices of which are being quoted and so enclose the important voucher of the same along with valid authorization certificate from the principal/manufacturer of the equipment.
6. In event of your rates being accepted, the articles will have to be supplied within **21 days** of the issue of the order failing which a penalty @ 2% per week up to maximum of 10% shall be imposed.
7. Quoted rates will remain valid for six months from the date of opening of the quotation.
8. Quotations unsealed or having over-writing and cutting without proper attestation signatures will not be considered.
9. Please attach copy of Sales Tax Regd. No. and Income Tax PAN of your firm failing which your quotation will not be entertained.
10. **Both technical and financial bids may be submitted separately**.
11. The bidder has to deposit the under mentioned EMD(inside technical bids) in favour of Director, IARI New Delhi-12 in form of an account payee demand draft from a commercial bank refundable to unsuccessful bidders.
12. EMD will be returned to the successful bidders on the deposit of 10% performance security in form of an account payee demand draft, fixed deposit receipt or bank guarantee from a commercial Bank.
13. In case the price quoted in INR for the equipment to be imported by the authorized supplier, the following conditions will be governed:

    a) Basic price of the equipment, Custom Duty, freight, Insurance and taxes etc. as applicable should be shown separately.
    b) The supply order shall be placed with the Principal supplier/manufacturer at abroad in order to avail the custom duty exemption.
    c) The payment relating to foreign supplier shall be arranged by the Indian supplier and it has to be ensured that the equipment is supplied within the stipulated time as indicated in the supply order. Delivery of the equipment shall be made direct from the air port to Genetics Division on the same date of released from the customs. All other expenses to be borne by the concerned Indian supplier quoting the price bid. Final payment will be made to Indian supplier after installation of equipment and deposit of performance security.
    d) On such arrangement no liability what so ever on account of demurrage charges etc shall be entertained by the IARI

14. The quantity of the quotation is always subject to change, and the competent authority has absolute right to accept or reject any or all quotation(s) in part or full, without assigning any reason thereof.
15. This Institute is entitled for availing of Custom Duty Exemption in Full. Hence FOB price, whenever lower than Net price in India, may preferably be quoted.
16. In case of item, a list of users to whom you supplied this item in the past, if any, may be attached along with a copy of catalogue/complete literature of the item. Warranty clause must be given both in case of supply or repair of item/ equipment otherwise your quotation will not be entertained.

List if specification attached.

S. No.	**Description**	**Qty**	**Reference**	**EMD**
1	REFRIGERATED CENTRIFUGE WITH DIFFERENT ROTORS AND STABILIZER	one	GD/SP/63/10-11	8000.00
2	DEEP FREEZER (- 20 DEG C) WITH STABILIZER AND EXTERNAL COOLING UNIT	one	GD/SP/64/10-11	1400.00
3	PRECISION BALANCE	one	GD/SP/65/10-11	1000.00
4	REFRIGERATOR (450L) with stabilizer	one	GD/SP/66/10-11	580.00
5	GRADIENT THERMALCYCLER ALONG WITH 3 KVA UPS AND EXTERNAL COOLING UNIT	one	GD/SP/67/10-11	10000.00
6	DIGITAL ELECTRONIC BALANCE	one	GD/SP/68/10-11	4000.00
7	POWER PACK (With Optional Accessories)	one	GD/SP/69/10-11	2000.00
8	INFRARED THERMOMETER	one	GD/SP/70/10-11	12000.00

Sr. Admn. Officer

Copy: forwarded to In charge USI for web notification with the information that soft copy has been transmitted at your e-mail address and web master.

1. REFRIGERATED CENTRIFUGE WITH DIFFERENT ROTORS AND STABILIZER:

- **Minimum speed:** 18000 rpm
- **Minimum g force:** 25,000 and above
- Brushless Induction Motor
- -20 deg C to +40 deg C Temp. Range
- 9/9 Acceleration and Deceleration Steps
- **Automatic rotor Recognition and Rotor Quick Set system.**
- Advance Drive Technology to compensate for small imbalance
- Digital Display of RPM, RCF, Temp, Time and Graphical display of Run Profile
- Bicontainment designed Autocalavable Rotors
- **User Interface:** Modern microprocessor controlled
- **Preset time:** 1 minute increments
- **Rotor identification:** Automatic
- **Preset speed** Preselection for speed with increments of 100 rpm with hold for longer runs
- **Preset g force** Preselection for force with increments of 100g
- **Drive system** Maintenance free brushless driver motor
- **Short spinning function** Should be there
- **Automatic rotor identification** Should be there
- **Braking system** Dynamic braking system
- **Temperature set range** **-10 deg C to + 40 deg C** with increments of 1 deg C
- **Pre-cooling at stand still** **Yes**
- **Temperature control accuracy** ± 2 deg C
- **Refrigeration system** Ecological refrigerant (CFC free)
- **Safety features** Overspeed detection
  Imbalance detection and cut-off
  Automatic motor driven lid lock with emergency lid lock release
  Overtemperature protection
  Stainless steel chamber with additional inner guard ring
  Over temperature protection
- **Warranty for centrifuge & rotors** Warranty to be given for 1 year atleast
- **Stabiliser (** 2 KVA) **compulsorily to be provided with the instrument**
- **Compulsory rotors to be provided with the instrument**: (**6 x 50 ml)** or (**8 x 50ml)** rotors **which would work at minimum of 12000 rpm**
- **Other rotors required and to be quoted separately:**

a) 24/30 x 1.5/2.2 ml rotors to work at 15000 rpm along with adapters for 0.2 ml and 0.5 ml b) PCR plate rotor (6 microplates) to work at 4800 rpm

- **It should be a licensed PCR machine with ISO/CE certification (License to be enclosed)**
- Working should be on standard Indian power supply of 230 V
- **Compulsory :** Printed catalogue/user manual of the instrument matching the specification must be provided along with the quotation.
- Microprocessor Controlled
- Minimum Speed: 18,000rpm and Minimum RCF : 25,000xg or more
- Maximum Capacity 4 x 250ml
- Suitable Servo Controlled Voltage Stabilizer should be quoted

2 SPECIFICATIONS FOR DEEP FREEZER (- 20 DEG C) WITH STABILIZER AND EXTERNAL COOLING UNIT:

- **Model:** Vertical double or single door
- **Temperature**: (**-) 20 DEG C**
- **Compressor:** CFC free heavy duty
- **Condensor:** Built in
- **Insulation:** PUFF
- **Drawers**: Combination of pull out and fast freeze shelves.
- **Thermostat**: Should be there
- **Control panel**: Control panel with LED display of temperature of the freezer inside and warning light
- **Fast freeze button and lamp**
- **Stabilizer:** Suitable stabilizer (time delay)
- One external 2.0 tonne cooling unit (split type) with suitable stabilizer to maintain the room temperature at 22 deg C. The cooling unit should be of branded make only and should be installed along with stand for the compressor unit.
- It should be a licensed deep freezer with ISO certification
- Working should be on standard Indian power supply of 220 V -240V
- **Compulsory :** Printed catalogue/user manual of the instrument matching the specification must be provided along with the quotation.

3 SPECIFICATIONS FOR PRECISION BALANCE:

- **Capacity:** 0.001g to 400g
- **Accuracy:** ±0.1 mg
- **Pan size:** 85 mm and above
- LCD display
- Standard RS -232 interphase
- Automatic internal calibration with built in weight.
- Weighing at 5 to 40 deg C
- Glass chamber and spacious draft shield chamber with sliding doors
- Adjustable legs to balance the instrument and bubble balance indicator should be provided
- Conform GLP/GMP and ISO 9001 standard (Certificate to be enclosed)
- To be provided with adapter and dust cover
- **Compulsory :** Printed catalogue/user manual of the instrument matching the specification must be provided along with the quotation.

4. **SPECIFICATIONS FOR REFRIGERATOR (450L) with stabilizer:**

- Vertical Type
- CFC/ HCFC free
- Hard Door
- Internal light
- Multi - positional shelf system
- Thermostatic control
- Lockable facility
- Capacity : 450 litres
- The unit should be supplied with suitable stabilizer of 1 KVA, time delay
- The unit should be meeting ISO specifications with star ratings for electricity consumption and **of branded make only** like LG, Samsung, Godrej etc
- **Compulsory :** Printed catalogue/user manual of the instrument matching the specification must be provided along with the quotation

5 GRADIENT THERMALCYCLER ALONG WITH 3 KVA UPS AND EXTERNAL COOLING UNIT:

- Peltier Multisensor technology, Solid State Thermo electric heating and cooling
- Blocks of **2 x 384 well** tubes and capable to hold un-skirted, semi-skirted and full-skirted PCR plates.
- Each 384 Block should be independently programmable and can be connected to LAN to control with PC.
- **Multipurpose PCR with interchangeable Blocks** Facility of interchangeable blocks of 96 and 48 tubes and 384 well plates.
- System should **recognize the block automatically** and configures its Software automatically

- Option to have multiple peripheral PCR units
- Temp. Range: 4°C ~ 99°C
- **Gradient:** 1°C ~ 30°C
- Temp. of Hot Lid 20 °C ~110 °C
- **Heating Rate: ≥4.0°C/Sec or Better**
- **Cooling Rate: ≥3.0°C/Sec or Better**
- System Temp. Accuracy: ±0.1°C or Better
- Block Temp. Uniformity: ≤+0.2°C or Better
- Block Temp. Accuracy: ≤+0.1°C or Better
- Operating Voltage: 220V/ 50Hz
- **Auto restart after power failure: compulsorily required**
- **Hold at:** 4 deg C
- **UPS:** Suitable online 3 KVA UPS with external batteries and battery stand giving minimum 2 hours back up on full load and supplied with power cords
- Low noise and power consumption
- Working should be on standard Indian power supply of 230 V
- At least two years comprehensive warrantee with one year additional service warranty.
- One external 2.0 tonne cooling unit (split type) with suitable stabilizer and to maintain the room temperature at 22 deg C for efficient working of the thermal cycler. The cooling unit should be of branded make only and installation should be done in the lab along with stand for unit.
- **It should be a licensed PCR machine with ISO/CE certification (License to be enclosed)**
- **Compulsory:** Printed catalogue/user manual of the instrument matching the specification must be provided along with the quotation.

6 . Specifications for Digital Electronic Balance:

- One touch, fully automatic internal calibration.
- Capacity 220g, Readability and Repeatability 0.1mg
- Pan Size Ø 90 mm.
- Balance should have the facility of inbuilt battery operation up to 8 hours.
- Standard RS 232 interfaces.
- Balance should have facility of direct data transfer to PC without software.
- Data memory function
- Standard under-hook for density measurement and weighing magnetic substances
- GLP/ISO Compliant

- Splash proof keyboard and **High Contrast Display with big numbers for easy reading.**
- Protective Cover for protection against dust and water.
- **Balance should have high grade chemical resistant.**

7 . SPECIFICATION OF POWER PACK (With Optional Accessories)

- Programmable power supply should be capable to operate four electrophoresis units simultaneously for four identical runs with graphic LED display.
- The output range should be 10-500 Volts in 1Volt steps, 0.01-2.5 A in 1 mA steps, 1-500 W in 1Watt steps.
- Constant voltage, current or Power with Automatic crossover
- Memory storage: 9 programs , 9 steps, Timer Control : 99 hr, 59 min
- At least 4 recessed sets in parallel.
- Automatic Power up after Power failure, automatic output shutdown against ground leak, open or short circuit, overload, over current arc discharge, sudden load change detection.
- Should be portable, light weight like not exceeding more than 2.5 kg
- Should be provided along with 4 power leads.

Accessories:

1. UV transparent gel tray of size 15x25 (W X L) cm with integrated fluorescent ruler.
2. Tape free gel casting module for leak free operations.
3. Casting gates to allow hassle free casting of gels directly in the electrophoresis cells.
4. Four 1.5 mm thickness, 28 well fix height tooth combs.
5. Cell Size : 20 x 42 x 10 cm (W X L X H)

8. Specifications for Infra Red Thermo meter

Infra Red Thermometer SPECIFICATIONS	
Temperature Range:	-25°F to +1400°F (-32°C to 760°C)
Temperature Accuracy:	1% of the reading or 2°F (1°C) whichever is greater
Temperature Resolution:	0.5°F (0.2°C)
Distance-to-Size Ratio:	8:1

Repeatability:	0.5% of the reading or 2°F (1°C) whichever is greater
Response Time (90%):	Less than a second
Spectral Range:	5 to 14 um
Emissivity:	0.10 to 1.0
Data logging:	Up to 12 points
Power:	9 V battery
Battery life:	14 hours continuous
Weight	Easy to carry
Modes	Ave, Diff, High/low alarm, Min max lock (for continous temp scan)
Comments	Back lit LCD, Alarm buzzer, low battery indicator
Batteries	2AA (**LR6**) Batteries
Batteries Life	IR Typ. 360 hr, Min 370 hr, probe 100hr
Output signals	USB
Measures	Leaf surface temperature, ambient temp. differential air temp.
Data logger	Single channel
Data Capacity	2 thousand readings (min.)
External RTD probe	include